



**ANDHRA UNIVERSITY**

**ఆంధ్ర విశ్వకళా పరిషత్**

Accredited by NAAC with 'A' Grade ISO 9001: 2015 Certified

## ONLINE CERTIFICATE COURSE PROMOTED BY CSC ACADEMY CENTERS

### Online Course: Sustainable Agriculture and Farming System

#### Summary

|                |                                                                                   |
|----------------|-----------------------------------------------------------------------------------|
| Course Type:   | Certificate                                                                       |
| Duration:      | 3 Months                                                                          |
| Category:      | Management                                                                        |
| Credit Points: | 2                                                                                 |
| Level:         | Undergraduate/Postgraduate                                                        |
| Eligibility:   | Minimum 10 <sup>th</sup> Std Pass or ITI or a Polytechnic Diploma Holder or Above |
| Fees:          | Rs. 1250/- (Rs. 500 Registration Fees and Rs. 1000 Course Fees)                   |

| Admission Batch for Certification Courses | Admissions in Month      | All Assessments Completion through LMS |
|-------------------------------------------|--------------------------|----------------------------------------|
| March                                     | 1st Mar, April, 30th May | July                                   |
| June                                      | 1st June, July, 30th Aug | Oct                                    |
| Sept                                      | 1st Sept, Oct, 30th Nov  | Jan                                    |
| Dec                                       | 1st Dec, Jan, 28th Feb   | April                                  |

#### Course Layout

##### Chapter 1 : Sustainable Agriculture

Current concepts - Definition - Goals and elements of Sustainable Agriculture - Problems and its impact on agriculture - Indicators of sustainability - current status of sustainable agriculture in India.

## **Chapter 2 : Modern agriculture in relation to sustainable agriculture. Introduction -**

Modern agronomic techniques for sustainable agriculture

## **Chapter 3 : Ecological balance and sustainability of agricultural resources**

Introduction - Factors affecting Ecological balance and sustainability of agricultural resources - Soil related problems: soil degradation - deforestation - accelerated soil erosion - siltation of reservoirs etc. - Causes and extent of soil problems in India and ameliorative measures.

## **Chapter 4 : Management of natural resources**

Introduction - Land - water - irrigation problems - Impact on High External Input Agriculture (HEIA) - Low External Input Agriculture (LEIA) and Low External Inputs for Sustainable Agriculture (LEISA) - vegetative cover - present scenario and management practices

## **Chapter 5: Environmental pollution**

Introduction – greenhouse effect and - potential effects on agriculture – depletion of ozone layer, methane - emissions from rice fields and mitigation options

## **Chapter 6 : Farming Systems**

Concepts - Definition - Principles and Components - system and systems approach, cropping systems and related terminology

## **Chapter 7 : Study of allied enterprises**

Significance of integrating crop and livestock - Dairying and sheep and goat rearing: breeds housing, feed and fodder requirements - biogas plant - Poultry farming: breeds housing feed and fodder requirements

## **Chapter 7 : Chemical Fertilizers and Pollution Control Measures**

introduction – nitrate pollution in soil and ground water and eutrophication – management factors to reduce fertilizer pollution

## **Chapter 8 : Organic Farming**

Concepts, Definition, History, Principles of organic farming - Relevance to modern agriculture and components of organic farming - Integrated nutrient management - merits and demerits of Organic farming

## **Chapter 9 : Integrated Farming System**

Components and advantages of Integrated Farming System - IFS models for wetland, irrigated dry land and dry land conditions

## **Chapter 10 : Biodiversity**

Importance - agricultural intensification and biodiversity - adverse impacts of genetic erosion conservation of natural resources - Protocols for the conservations of biodiversity

### **Books and References**

- Sustainable Agriculture by Ramesh Umrani and C.K. Jain
- Farming System and Sustainable Agriculture by S.R. Reddy

### **CRITERIA TO GET A CERTIFICATE**

- Continuous Evaluation – 25% weightage, Students need to complete 2 Assignments (MCQ Type) per Course through LMS
- Exam Score = 75% Weightage, Students to Attempt the Assessment through LMS – (MCQ Type)
- Passing Criteria – 40%

Only the e-certificate will be made available. Hard copies will not be dispatched. Thanks for your interest in our online courses and certification. Happy Learning.